

[Go Back to previous](#)

GenCore version 6.3
Copyright (c) 1993 - 2009 Bioceleration Ltd.

OM nucleic - nucleic search, using sw model

```
Run on:      September  2, 2009, 13:23:52 ; Search time 5899 Seconds
              (without alignments)
              67685.738 Million cell updates/sec
```

Title: US-10-506-327-23
Perfect score: 6070
Sequence: 1 tcaagacatccttgattaag.....actattttgggagtgatgtc 6070

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 115145107 seqs, 32888312461 residues

Total number of hits satisfying chosen parameters: 230290214

```
Minimum DB seq length: 0
Maximum DB seq length: 2000000000
```

```
Post-processing: Minimum Match 0%
                  Maximum Match 100%
                  Listing first 45 summaries
```

```
Database : Pending_Patents_NA_Main:*
1: /ABSS/Data/CRF/ptodata/2/pna/PCTUSA_COMB.seq:*
2: /ABSS/Data/CRF/ptodata/2/pna/PCTUSB_COMB.seq:*
3: /ABSS/Data/CRF/ptodata/2/pna/PCTUSC_COMB.seq:*
4: /ABSS/Data/CRF/ptodata/2/pna/PCTUSD_COMB.seq:*
5: /ABSS/Data/CRF/ptodata/2/pna/US075_COMB.seq:*
6: /ABSS/Data/CRF/ptodata/2/pna/US076_COMB.seq:*
7: /ABSS/Data/CRF/ptodata/2/pna/US077_COMB.seq:*
8: /ABSS/Data/CRF/ptodata/2/pna/US078_COMB.seq:*
9: /ABSS/Data/CRF/ptodata/2/pna/US079_COMB.seq:*
10: /ABSS/Data/CRF/ptodata/2/pna/US080_COMB.seq:*
11: /ABSS/Data/CRF/ptodata/2/pna/US081_COMB.seq:*
12: /ABSS/Data/CRF/ptodata/2/pna/US082_COMB.seq:*
13: /ABSS/Data/CRF/ptodata/2/pna/US083_COMB.seq:*
14: /ABSS/Data/CRF/ptodata/2/pna/US084_COMB.seq:*
15: /ABSS/Data/CRF/ptodata/2/pna/US085_COMB.seq:*
```

16: /ABSS/Data/CRF/ptodata/2/pna/US086_COMB.seq:*
17: /ABSS/Data/CRF/ptodata/2/pna/US087_COMB.seq:*
18: /ABSS/Data/CRF/ptodata/2/pna/US088_COMB.seq:*
19: /ABSS/Data/CRF/ptodata/2/pna/US089_COMB.seq:*
20: /ABSS/Data/CRF/ptodata/2/pna/US090_COMB.seq:*
21: /ABSS/Data/CRF/ptodata/2/pna/US091_COMB.seq:*
22: /ABSS/Data/CRF/ptodata/2/pna/US092_COMB.seq:*
23: /ABSS/Data/CRF/ptodata/2/pna/US093_COMB.seq:*
24: /ABSS/Data/CRF/ptodata/2/pna/US094_COMB.seq:*
25: /ABSS/Data/CRF/ptodata/2/pna/US095A_COMB.seq:*
26: /ABSS/Data/CRF/ptodata/2/pna/US095B_COMB.seq:*
27: /ABSS/Data/CRF/ptodata/2/pna/US095C_COMB.seq:*
28: /ABSS/Data/CRF/ptodata/2/pna/US096A_COMB.seq:*
29: /ABSS/Data/CRF/ptodata/2/pna/US096B_COMB.seq:*
30: /ABSS/Data/CRF/ptodata/2/pna/US096C_COMB.seq:*
31: /ABSS/Data/CRF/ptodata/2/pna/US097A_COMB.seq:*
32: /ABSS/Data/CRF/ptodata/2/pna/US097B_COMB.seq:*
33: /ABSS/Data/CRF/ptodata/2/pna/US098A_COMB.seq:*
34: /ABSS/Data/CRF/ptodata/2/pna/US098B_COMB.seq:*
35: /ABSS/Data/CRF/ptodata/2/pna/US099A_COMB.seq:*
36: /ABSS/Data/CRF/ptodata/2/pna/US099B_COMB.seq:*
37: /ABSS/Data/CRF/ptodata/2/pna/US099C_COMB.seq:*
38: /ABSS/Data/CRF/ptodata/2/pna/US099D_COMB.seq:*
39: /ABSS/Data/CRF/ptodata/2/pna/US100_COMB.seq:*
40: /ABSS/Data/CRF/ptodata/2/pna/US101_COMB.seq:*
41: /ABSS/Data/CRF/ptodata/2/pna/US102A_COMB.seq:*
42: /ABSS/Data/CRF/ptodata/2/pna/US102B_COMB.seq:*
43: /ABSS/Data/CRF/ptodata/2/pna/US103A_COMB.seq:*
44: /ABSS/Data/CRF/ptodata/2/pna/US103B_COMB.seq:*
45: /ABSS/Data/CRF/ptodata/2/pna/US104_COMB.seq:*
46: /ABSS/Data/CRF/ptodata/2/pna/US105_COMB.seq:*
47: /ABSS/Data/CRF/ptodata/2/pna/US106A_COMB.seq:*
48: /ABSS/Data/CRF/ptodata/2/pna/US106B_COMB.seq:*
49: /ABSS/Data/CRF/ptodata/2/pna/US107A_COMB.seq:*
50: /ABSS/Data/CRF/ptodata/2/pna/US107B_COMB.seq:*
51: /ABSS/Data/CRF/ptodata/2/pna/US107C_COMB.seq:*
52: /ABSS/Data/CRF/ptodata/2/pna/US107D_COMB.seq:*
53: /ABSS/Data/CRF/ptodata/2/pna/US107E_COMB.seq:*
54: /ABSS/Data/CRF/ptodata/2/pna/US107F_COMB.seq:*
55: /ABSS/Data/CRF/ptodata/2/pna/US107G_COMB.seq:*
56: /ABSS/Data/CRF/ptodata/2/pna/US107H_COMB.seq:*
57: /ABSS/Data/CRF/ptodata/2/pna/US107I_COMB.seq:*
58: /ABSS/Data/CRF/ptodata/2/pna/US108_COMB.seq:*
59: /ABSS/Data/CRF/ptodata/2/pna/US109A_COMB.seq:*
60: /ABSS/Data/CRF/ptodata/2/pna/US109B_COMB.seq:*
61: /ABSS/Data/CRF/ptodata/2/pna/US109C_COMB.seq:*
62: /ABSS/Data/CRF/ptodata/2/pna/US10709577B.seq:*
63: /ABSS/Data/CRF/ptodata/2/pna/US10709577B.seq.2:*
64: /ABSS/Data/CRF/ptodata/2/pna/US10709577B.seq.3:*
65: /ABSS/Data/CRF/ptodata/2/pna/US10709739B.seq:*
66: /ABSS/Data/CRF/ptodata/2/pna/US10940892.seq:*
67: /ABSS/Data/CRF/ptodata/2/pna/US110A_COMB.seq:*
68: /ABSS/Data/CRF/ptodata/2/pna/US110B_COMB.seq:*
69: /ABSS/Data/CRF/ptodata/2/pna/US110C_COMB.seq:*
70: /ABSS/Data/CRF/ptodata/2/pna/US110D_COMB.seq:*
71: /ABSS/Data/CRF/ptodata/2/pna/US111A_COMB.seq:*
72: /ABSS/Data/CRF/ptodata/2/pna/US111B_COMB.seq:*
73: /ABSS/Data/CRF/ptodata/2/pna/US112_COMB.seq:*
74: /ABSS/Data/CRF/ptodata/2/pna/US113A_COMB.seq:*
75: /ABSS/Data/CRF/ptodata/2/pna/US113B_COMB.seq:*
76: /ABSS/Data/CRF/ptodata/2/pna/US113C_COMB.seq:*

77: /ABSS/Data/CRF/ptodata/2/pna/US113D_COMB.seq:*
 78: /ABSS/Data/CRF/ptodata/2/pna/US114A_COMB.seq:*
 79: /ABSS/Data/CRF/ptodata/2/pna/US114B_COMB.seq:*
 80: /ABSS/Data/CRF/ptodata/2/pna/US114C_COMB.seq:*
 81: /ABSS/Data/CRF/ptodata/2/pna/US115A_COMB.seq:*
 82: /ABSS/Data/CRF/ptodata/2/pna/US115B_COMB.seq:*
 83: /ABSS/Data/CRF/ptodata/2/pna/US116_COMB.seq:*
 84: /ABSS/Data/CRF/ptodata/2/pna/US117_COMB.seq:*
 85: /ABSS/Data/CRF/ptodata/2/pna/US118_COMB.seq:*
 86: /ABSS/Data/CRF/ptodata/2/pna/US119_COMB.seq:*
 87: /ABSS/Data/CRF/ptodata/2/pna/US120_COMB.seq:*
 88: /ABSS/Data/CRF/ptodata/2/pna/US121_COMB.seq:*
 89: /ABSS/Data/CRF/ptodata/2/pna/US122_COMB.seq:*
 90: /ABSS/Data/CRF/ptodata/2/pna/US123_COMB.seq:*
 91: /ABSS/Data/CRF/ptodata/2/pna/US124_COMB.seq:*
 92: /ABSS/Data/CRF/ptodata/2/pna/US125_COMB.seq:*
 93: /ABSS/Data/CRF/ptodata/2/pna/US127_COMB.seq:*
 94: /ABSS/Data/CRF/ptodata/2/pna/US600_COMB.seq:*
 95: /ABSS/Data/CRF/ptodata/2/pna/US601_COMB.seq:*
 96: /ABSS/Data/CRF/ptodata/2/pna/US602A_COMB.seq:*
 97: /ABSS/Data/CRF/ptodata/2/pna/US602B_COMB.seq:*
 98: /ABSS/Data/CRF/ptodata/2/pna/US603_COMB.seq:*
 99: /ABSS/Data/CRF/ptodata/2/pna/US604A_COMB.seq:*
 100: /ABSS/Data/CRF/ptodata/2/pna/US604B_COMB.seq:*
 101: /ABSS/Data/CRF/ptodata/2/pna/US605_COMB.seq:*
 102: /ABSS/Data/CRF/ptodata/2/pna/US606_COMB.seq:*
 103: /ABSS/Data/CRF/ptodata/2/pna/US607_COMB.seq:*
 104: /ABSS/Data/CRF/ptodata/2/pna/US608_COMB.seq:*
 105: /ABSS/Data/CRF/ptodata/2/pna/US609_COMB.seq:*
 106: /ABSS/Data/CRF/ptodata/2/pna/US610_COMB.seq:*
 107: /ABSS/Data/CRF/ptodata/2/pna/US611_COMB.seq:*
 108: /ABSS/Data/CRF/ptodata/2/pna/US612_COMB.seq:*

SUMMARIES

Result No.	Score	% Query		Length	DB	ID	Description
		Match					
1	6070	100.0		6070	46	US-10-506-327-23	Sequence 23, Appl
2	1396	23.0		1396	46	US-10-506-327-22	Sequence 22, Appl
3	977.8	16.1		1051	4	PCT-US09-32660-5	Sequence 5, Appli
4	977.8	16.1		1051	90	US-12-363-326-5	Sequence 5, Appli
5	977.8	16.1		3029	4	PCT-US09-32660-30	Sequence 30, Appl
6	977.8	16.1		3029	90	US-12-363-326-30	Sequence 30, Appl
7	977.8	16.1		3749	4	PCT-US09-32660-31	Sequence 31, Appl
8	977.8	16.1		3749	90	US-12-363-326-31	Sequence 31, Appl
9	977.8	16.1		3971	4	PCT-US09-32660-32	Sequence 32, Appl
10	977.8	16.1		3971	90	US-12-363-326-32	Sequence 32, Appl
11	977.8	16.1		4691	4	PCT-US09-32660-33	Sequence 33, Appl
12	977.8	16.1		4691	90	US-12-363-326-33	Sequence 33, Appl
13	977.8	16.1		4913	4	PCT-US09-32660-34	Sequence 34, Appl
14	977.8	16.1		4913	90	US-12-363-326-34	Sequence 34, Appl
15	977.8	16.1		5633	4	PCT-US09-32660-35	Sequence 35, Appl
16	977.8	16.1		5633	90	US-12-363-326-35	Sequence 35, Appl
17	956	15.7		1080	4	PCT-US09-32660-26	Sequence 26, Appl
18	956	15.7		1080	90	US-12-363-326-26	Sequence 26, Appl
19	321	5.3		1151	46	US-10-506-327-16	Sequence 16, Appl
20	320.4	5.3		1172	46	US-10-506-327-2	Sequence 2, Appli
21	320.4	5.3		1175	46	US-10-506-327-20	Sequence 20, Appl
22	84.8	1.4		1892	87	US-12-090-702-19	Sequence 19, Appl
23	80.4	1.3		1149	41	US-10-266-090-33588	Sequence 33588, A
c 24	80.4	1.3		1319	41	US-10-266-090-24327	Sequence 24327, A

c	25	79.4	1.3	1317241	3	PCT-US06-08981-73	Sequence 73, Appl
c	26	79.4	1.3	1317241	72	US-11-184-236-73	Sequence 73, Appl
	27	79.2	1.3	8056	45	US-10-473-126-240	Sequence 240, App
c	28	79	1.3	1063	41	US-10-266-090-10455	Sequence 10455, A
c	29	78	1.3	1003	41	US-10-266-090-37449	Sequence 37449, A
c	30	77.8	1.3	8056	45	US-10-473-126-386	Sequence 386, App
	31	77.6	1.3	1554	46	US-10-595-495-123	Sequence 123, App
	32	77.6	1.3	1554	46	US-10-595-495A-123	Sequence 123, App
	33	77.6	1.3	8056	45	US-10-473-126-386	Sequence 386, App
c	34	77.2	1.3	2205	41	US-10-266-090-32333	Sequence 32333, A
	35	77	1.3	824	96	US-60-207-458-18907	Sequence 18907, A
	36	76.8	1.3	2300	3	PCT-US06-46920-35494	Sequence 35494, A
	37	76.8	1.3	2300	83	US-11-636-385-35494	Sequence 35494, A
	38	76.8	1.3	2300	83	US-11-636-385A-35494	Sequence 35494, A
	39	76.8	1.3	2300	103	US-60-762-056-35494	Sequence 35494, A
	40	76.8	1.3	6000	104	US-60-873-739-6389	Sequence 6389, Ap
	41	76.8	1.3	6000	104	US-60-873-853-1518	Sequence 1518, Ap
c	42	76.2	1.3	627	45	US-10-425-115-24964	Sequence 24964, A
c	43	76.2	1.3	3673778	43	US-10-312-841A-1	Sequence 1, Appli
c	44	75.8	1.2	4247	90	US-12-332-703-59	Sequence 59, Appl
c	45	75.8	1.2	4247	107	US-61-121-882-59	Sequence 59, Appl

ALIGNMENTS

RESULT 1

US-10-506-327-23

; Sequence 23, Application US/10506327

; GENERAL INFORMATION:

; APPLICANT: HIRAMATSU, Shingo

; APPLICANT: TANAKA, Takashi

; APPLICANT: YAMADA, Katsushige

; APPLICANT: TAMURA, Toshiki

; TITLE OF INVENTION: PRODUCTION OF PHYSIOLOGICALLY ACTIVE PROTEINS USING GENE RECOMB

; TITLE OF INVENTION: SILKWORMS

; FILE REFERENCE: 0210-0190PUS1

; CURRENT APPLICATION NUMBER: US/10/506,327

; CURRENT FILING DATE: 2004-09-02

; PRIOR APPLICATION NUMBER: PCT/JP03/02675

; PRIOR FILING DATE: 2003-03-06

; NUMBER OF SEQ ID NOS: 38

; SOFTWARE: Patent-In 3.2

; SEQ ID NO 23

; LENGTH: 6070

; TYPE: DNA

; ORGANISM: Bombyx mori

US-10-506-327-23

Query Match 100.0%; Score 6070; DB 46; Length 6070;

Best Local Similarity 100.0%;

Matches 6070; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	TCAAGACATCCTTGATTAAGGCAGCTGCCGATATTGACATGGACCTCGTTCGTGCTGCGA	60
Db	1	TCAAGACATCCTTGATTAAGGCAGCTGCCGATATTGACATGGACCTCGTTCGTGCTGCGA	60
Qy	61	TAGACGACTGGCCGCGCAGATTGAAGGCCTGTATTCAAAATCACGGAGGTCATTTTGAAT	120
Db	61	TAGACGACTGGCCGCGCAGATTGAAGGCCTGTATTCAAAATCACGGAGGTCATTTTGAAT	120

Qy	121	AAACTTTAGTGTCTATAAGAATCTATGTTTTGTTAAGTTCATTTTGGTATATGAATGGTTA	180
Db	121	AAACTTTAGTGTCTATAAGAATCTATGTTTTGTTAAGTTCATTTTGGTATATGAATGGTTA	180
Qy	181	CATAATGAATAAACTTGTTTCAATTATTTTACATTAAACATGTGACAGAATTTATGACCT	240
Db	181	CATAATGAATAAACTTGTTTCAATTATTTTACATTAAACATGTGACAGAATTTATGACCT	240
Qy	241	GACTAGGTAGGTACAAACAGCCTTTTTGATATTAGAAAACCTAAGTAAAATAGCCTACGGT	300
Db	241	GACTAGGTAGGTACAAACAGCCTTTTTGATATTAGAAAACCTAAGTAAAATAGCCTACGGT	300
Qy	301	CACATCTCTTTCCGTGGGTGTCGTTAAAGGGCGACTTAGAGAACCACCAAGAACGTAGCA	360
Db	301	CACATCTCTTTCCGTGGGTGTCGTTAAAGGGCGACTTAGAGAACCACCAAGAACGTAGCA	360
Qy	361	GAATCCTCAGAGTGTCTATACCAGCATACAGCCATCGCTAACTGCTATTTACTGGTAATAG	420
Db	361	GAATCCTCAGAGTGTCTATACCAGCATACAGCCATCGCTAACTGCTATTTACTGGTAATAG	420
Qy	421	GGCACATTGTAATCTCAGTTAACCATACTGTCGGGCCACCATCTAGCCTATTTCTGCCAC	480
Db	421	GGCACATTGTAATCTCAGTTAACCATACTGTCGGGCCACCATCTAGCCTATTTCTGCCAC	480
Qy	481	GAATCAATCGTGAGTGATGGACATAGAGAACTATTAGTTGAGAAGAAAACAAGAGCACT	540
Db	481	GAATCAATCGTGAGTGATGGACATAGAGAACTATTAGTTGAGAAGAAAACAAGAGCACT	540
Qy	541	AAAGGTTTGATATTGACAAAAATCTACTTCGCCGTCCTCCATAGGTTTATTGTCTCTCA	600
Db	541	AAAGGTTTGATATTGACAAAAATCTACTTCGCCGTCCTCCATAGGTTTATTGTCTCTCA	600
Qy	601	TTAGTCCAGAACAGCAGTTACAGACGTAAGCTTTTACGCACAACTACAGGGTTGCTCTT	660
Db	601	TTAGTCCAGAACAGCAGTTACAGACGTAAGCTTTTACGCACAACTACAGGGTTGCTCTT	660
Qy	661	TATTGTATCGAAAATATGGGACCTGAATAAGGGCGATTTTGACGCGTCCTGCCCCGCCAT	720
Db	661	TATTGTATCGAAAATATGGGACCTGAATAAGGGCGATTTTGACGCGTCCTGCCCCGCCAT	720
Qy	721	TCCCGATCCTACGGACAGAATGGCAAGCAGTCGACGTCGCCCCAAACACGTCATTTCCGA	780
Db	721	TCCCGATCCTACGGACAGAATGGCAAGCAGTCGACGTCGCCCCAAACACGTCATTTCCGA	780
Qy	781	TCCTCACGATCCACTAACGGTGCTTTAGGTACCTCAAGCACCGGTCATCGTTCTCGTCGG	840
Db	781	TCCTCACGATCCACTAACGGTGCTTTAGGTACCTCAAGCACCGGTCATCGTTCTCGTCGG	840
Qy	841	ACCCGTCGCTTGCGACGAAGGGCTCGACGAGCAAATTAACCCTCAGACACAGCCCACTGA	900
Db	841	ACCCGTCGCTTGCGACGAAGGGCTCGACGAGCAAATTAACCCTCAGACACAGCCCACTGA	900
Qy	901	GTTTCTCGCCGGATCTTCTCAGCGGGTCGCGTTTCCGATCCGGTGGTAGATTCTGCGAAG	960
Db	901	GTTTCTCGCCGGATCTTCTCAGCGGGTCGCGTTTCCGATCCGGTGGTAGATTCTGCGAAG	960
Qy	961	CACGGCTCTTGCTAGGATTCGTGTTAGCAACGTCGTCAGGTTTGAGCCCCGTGAGCTCAC	1020
Db	961	CACGGCTCTTGCTAGGATTCGTGTTAGCAACGTCGTCAGGTTTGAGCCCCGTGAGCTCAC	1020
Qy	1021	TTACTAGTTAAGGTTACGCTGAAATAGCCTCTCAAGGCTCTCAGCTAGGTAGGAAACAAA	1080

Db	1021	 TTACTAGTTAAGGTTACGCTGAAATAGCCTCTCAAGGCTCTCAGCTAGGTAGGAAACAAA	1080
Qy	1081	AAAAAAAGTCCTGCCCTTAACACCGTTGCGATGGCTTGTCTTCTGCAGCGTACTGTCGTG	1140
Db	1081	 AAAAAAAGTCCTGCCCTTAACACCGTTGCGATGGCTTGTCTTCTGCAGCGTACTGTCGTG	1140
Qy	1141	GCAGGGCGGTACCGCACCATCTTTTTCGACGCCACCTTGTGATCTGAAGGCGAAGATACT	1200
Db	1141	 GCAGGGCGGTACCGCACCATCTTTTTCGACGCCACCTTGTGATCTGAAGGCGAAGATACT	1200
Qy	1201	CGACCTTAATGATTGAGGCAAGAGCGTAATACCTCGCGCTCCCTAGACGAGTAGATCTCG	1260
Db	1201	 CGACCTTAATGATTGAGGCAAGAGCGTAATACCTCGCGCTCCCTAGACGAGTAGATCTCG	1260
Qy	1261	TGGAAGATTTCGGCACACGGCACACAAAAATAGCTTTTGAGATAGCCTTCAATGTAATTAT	1320
Db	1261	 TGGAAGATTTCGGCACACGGCACACAAAAATAGCTTTTGAGATAGCCTTCAATGTAATTAT	1320
Qy	1321	GTTTTTATATATATTTACTAGCTGACCCGGCAAACGTTGTGTTGCCTTAAATAAGATTTC	1380
Db	1321	 GTTTTTATATATATTTACTAGCTGACCCGGCAAACGTTGTGTTGCCTTAAATAAGATTTC	1380
Qy	1381	TAGGGAAATTCTAGTGTAGAAAAATAACCTCATTCAACCACATAATACCTCATTATAACC	1440
Db	1381	 TAGGGAAATTCTAGTGTAGAAAAATAACCTCATTCAACCACATAATACCTCATTATAACC	1440
Qy	1441	AAAAAAAAATAATATCCAAAAATAAAAAATATAAAATAAATGTTTGGGGTGGACAACCCCT	1500
Db	1441	 AAAAAAAAATAATATCCAAAAATAAAAAATATAAAATAAATGTTTGGGGTGGACAACCCCT	1500
Qy	1501	TATCACATAGGGGTATGAAAATTAGATAGTAGCCGATTCTCAGACCTACTGAACATACTA	1560
Db	1501	 TATCACATAGGGGTATGAAAATTAGATAGTAGCCGATTCTCAGACCTACTGAACATACTA	1560
Qy	1561	TTGATACACAAATAAAACCAAAAAACATGGCTGAAAAATGTATAGTAGGTATTGTATTA	1620
Db	1561	 TTGATACACAAATAAAACCAAAAAACATGGCTGAAAAATGTATAGTAGGTATTGTATTA	1620
Qy	1621	TTAAGTGTATAATCTATGATGTATATGAGTAAGTAAGACAGGAGACCGGCTTCGTCCTCA	1680
Db	1621	 TTAAGTGTATAATCTATGATGTATATGAGTAAGTAAGACAGGAGACCGGCTTCGTCCTCA	1680
Qy	1681	TCCGTCATAAAAACCGTCATAAAAAATCAAACCCGCAAAATTATAATTTGCGTAATTACTG	1740
Db	1681	 TCCGTCATAAAAACCGTCATAAAAAATCAAACCCGCAAAATTATAATTTGCGTAATTACTG	1740
Qy	1741	GTGGCTGGTGGTAGGACCTTCTTGTGAGTCCGCGCGGGTAGGTACCACCATCTGACTATT	1800
Db	1741	 GTGGCTGGTGGTAGGACCTTCTTGTGAGTCCGCGCGGGTAGGTACCACCATCTGACTATT	1800
Qy	1801	CTGCCGTGAAGCAGTAATGGGTTTCGGTTTGAAGGGCGGGACAGCCGTTGTAACATACT	1860
Db	1801	 CTGCCGTGAAGCAGTAATGGGTTTCGGTTTGAAGGGCGGGACAGCCGTTGTAACATACT	1860
Qy	1861	TGAGACCTTAGAACTTATATCTCAATGTGGGTGGCGCATTTTTTTACGGTAGGCAGCGGC	1920
Db	1861	 TGAGACCTTAGAACTTATATCTCAATGTGGGTGGCGCATTTTTTTACGGTAGGCAGCGGC	1920
Qy	1921	TTGGCTCTGCCCCTGGCATTGCTGAAGTCCATAGGCGACGGTTACCACTCACCATCAGGT	1980

Db	1921	TTGGCTCTGCCCCCTGGCATTGCTGAAGTCCATAGGCGACGGTTACCACTCACCATCAGGT	1980
Qy	1981	GGGCCGTATGGCCGTCTGCCTACAAAATCAATAAAAAAAAAAATAAAAAATTTACGTTGTA	2040
Db	1981	GGGCCGTATGGCCGTCTGCCTACAAAATCAATAAAAAAAAAAATAAAAAATTTACGTTGTA	2040
Qy	2041	GATGTCTATGGGCTCCAGTAACCACTTAACACCAGGCGGGCTGTGAGCTCGTCCACCCAT	2100
Db	2041	GATGTCTATGGGCTCCAGTAACCACTTAACACCAGGCGGGCTGTGAGCTCGTCCACCCAT	2100
Qy	2101	CTAAGCAATAAAAAATAAATAAATAGATAGTTGATCAGTAGTGACCGGCGAGGGCGGGAG	2160
Db	2101	CTAAGCAATAAAAAATAAATAAATAGATAGTTGATCAGTAGTGACCGGCGAGGGCGGGAG	2160
Qy	2161	ATCAAATTGAATTTAAAATAAAACATAATTAAAGGAATTTGAAACTATAAACTCTGAATA	2220
Db	2161	ATCAAATTGAATTTAAAATAAAACATAATTAAAGGAATTTGAAACTATAAACTCTGAATA	2220
Qy	2221	ATAATTTATCGTACTACAATTATAATATTTGATTGCCATCTTGCAACCTTATTGCGGATC	2280
Db	2221	ATAATTTATCGTACTACAATTATAATATTTGATTGCCATCTTGCAACCTTATTGCGGATC	2280
Qy	2281	TGTGAATAGAAAAAAAAAAAAATCGGGATGGA AAAAATAGGGGTTGATCGTATAAGAGTG	2340
Db	2281	TGTGAATAGAAAAAAAAAAAAATCGGGATGGA AAAAATAGGGGTTGATCGTATAAGAGTG	2340
Qy	2341	AAAATTGAGAGTAATATGGAATTTTTTATTTTAAGTCATGACAAAATAAAAAATAAGATC	2400
Db	2341	AAAATTGAGAGTAATATGGAATTTTTTATTTTAAGTCATGACAAAATAAAAAATAAGATC	2400
Qy	2401	TTGCCAAAAAATTTAAGTTTATTATTAAATTAAGTTTAACAAATAAAAAATTGGGGTTG	2460
Db	2401	TTGCCAAAAAATTTAAGTTTATTATTAAATTAAGTTTAACAAATAAAAAATTGGGGTTG	2460
Qy	2461	ATCGCAGAGGGGTGAAAATTTAGGGTTTTATGTATTTTTGTATGCTGTATCATAAAAAAA	2520
Db	2461	ATCGCAGAGGGGTGAAAATTTAGGGTTTTATGTATTTTTGTATGCTGTATCATAAAAAAA	2520
Qy	2521	TAAAAACAAAAATAAAAAATAGGGGGATGAAAAATAAATGTTGTTTCGATTCTCAACCTG	2580
Db	2521	TAAAAACAAAAATAAAAAATAGGGGGATGAAAAATAAATGTTGTTTCGATTCTCAACCTG	2580
Qy	2581	GCCGATATGCACGCTAAGATTCACAAAAATCGGTCGAGCCGTTTCGGAGGAGTTCAATCA	2640
Db	2581	GCCGATATGCACGCTAAGATTCACAAAAATCGGTCGAGCCGTTTCGGAGGAGTTCAATCA	2640
Qy	2641	CGCACCCCGTCACACGAGAATTTTATTTATTAGATTTAGAAGAGCTGAAAGATAAATCGA	2700
Db	2641	CGCACCCCGTCACACGAGAATTTTATTTATTAGATTTAGAAGAGCTGAAAGATAAATCGA	2700
Qy	2701	TATTTAATTTTGTAAGTTGTCTTGATGATACATTTTTTCGTTTGTCATTCTTTCCTGCAG	2760
Db	2701	TATTTAATTTTGTAAGTTGTCTTGATGATACATTTTTTCGTTTGTCATTCTTTCCTGCAG	2760
Qy	2761	TTAGAACATAATATAAAATGCAAATGAAAAATAGAAATATAATAAATAATAATAATAAA	2820
Db	2761	TTAGAACATAATATAAAATGCAAATGAAAAATAGAAATATAATAAATAATAATAATAAA	2820
Qy	2821	TAATAAATATTTACTAACAATCACGCTACGTTAACTGGTCCCGTGATAAGTTCGTAAAGA	2880
Db	2821	TAATAAATATTTACTAACAATCACGCTACGTTAACTGGTCCCGTGATAAGTTCGTAAAGA	2880

Qy	2881	ACTTGTGTTACAGGTACCAGATAACGGATATAAATGTAAGATTTTTATTATACACATACA	2940
Db	2881	ACTTGTGTTACAGGTACCAGATAACGGATATAAATGTAAGATTTTTATTATACACATACA	2940
Qy	2941	TATATTTTCATATACATTTCATAACCCTGGAAAAATACATTTATATTTATCATACAAATATCT	3000
Db	2941	TATATTTTCATATACATTTCATAACCCTGGAAAAATACATTTATATTTATCATACAAATATCT	3000
Qy	3001	TCCCTTGGCGGGATTTCGAACCCGCGACCCCCTTGTGTAGTGACAATGTCACCTACCACTA	3060
Db	3001	TCCCTTGGCGGGATTTCGAACCCGCGACCCCCTTGTGTAGTGACAATGTCACCTACCACTA	3060
Qy	3061	CACCCTCTGGCATTGCTGGGCGACGGTAACCAACCCACCATTAGGTGGGCCATATGCTCGT	3120
Db	3061	CACCCTCTGGCATTGCTGGGCGACGGTAACCAACCCACCATTAGGTGGGCCATATGCTCGT	3120
Qy	3121	CTGCCTACAAGGGAAATAAAAAAATATCCTAATATAAATTGCATTAATTTTTTAAACC	3180
Db	3121	CTGCCTACAAGGGAAATAAAAAAATATCCTAATATAAATTGCATTAATTTTTTAAACC	3180
Qy	3181	GACTTTCAATCACAATGAAGACAGATTCTCGTCGAAGTTTGTTTTTGAACTATATCAAT	3240
Db	3181	GACTTTCAATCACAATGAAGACAGATTCTCGTCGAAGTTTGTTTTTGAACTATATCAAT	3240
Qy	3241	AACTTTTTCATTATCCGTTCTTCGTCTTTTGTCTTTTTTTCGCAACAAAACGAACAAAAC	3300
Db	3241	AACTTTTTCATTATCCGTTCTTCGTCTTTTGTCTTTTTTTCGCAACAAAACGAACAAAAC	3300
Qy	3301	GTTCTAATTCGAAAGATGTTTTGTACGAAAGTTTGAATAAGTGCTTAATTGCAAGTAAC	3360
Db	3301	GTTCTAATTCGAAAGATGTTTTGTACGAAAGTTTGAATAAGTGCTTAATTGCAAGTAAC	3360
Qy	3361	GTAACAATGTTTTAGGGTTCGGTCCTCAATAAATTTCGACCAATAAACCATACAAATTCTT	3420
Db	3361	GTAACAATGTTTTAGGGTTCGGTCCTCAATAAATTTCGACCAATAAACCATACAAATTCTT	3420
Qy	3421	TAACATTTTTTTAATCTTATACTAGCTGACCCGGCAGACTTCGTGGTGCCTCAATCGATA	3480
Db	3421	TAACATTTTTTTAATCTTATACTAGCTGACCCGGCAGACTTCGTGGTGCCTCAATCGATA	3480
Qy	3481	AATAAAATACCTATGCTTCTGTATAAAATAAACATAAAACAAACAAAAGGAATCCGTCCG	3540
Db	3481	AATAAAATACCTATGCTTCTGTATAAAATAAACATAAAACAAACAAAAGGAATCCGTCCG	3540
Qy	3541	ACGGGAGACACATCAAAGGAAAAACATCTTTTTTATTTTTTTTACCTTTTAAACCTTCTCT	3600
Db	3541	ACGGGAGACACATCAAAGGAAAAACATCTTTTTTATTTTTTTTACCTTTTAAACCTTCTCT	3600
Qy	3601	GGACTTCCACAAATAATTTAAGACCAAAATTAGCCAAATCGGTCTAGCATTTTCGAGTTT	3660
Db	3601	GGACTTCCACAAATAATTTAAGACCAAAATTAGCCAAATCGGTCTAGCATTTTCGAGTTT	3660
Qy	3661	TAGCGAGACTAACGAACAGCAATTCATTTTATATACACAGATTTATGTTACCGGGGTCT	3720
Db	3661	TAGCGAGACTAACGAACAGCAATTCATTTTATATACACAGATTTATGTTACCGGGGTCT	3720
Qy	3721	AGTGACCTAAACGACTTCAGCTCTAACACTAGGCTAACTCAGGCTTAGTAGCCTGGTCCT	3780
Db	3721	AGTGACCTAAACGACTTCAGCTCTAACACTAGGCTAACTCAGGCTTAGTAGCCTGGTCCT	3780

Qy	3781	AGTGTTAGATTTGAAGTCGTCTAATGCAAAGATTATTGGATCTGATGGATCCGTAAGGAC	3840
Db	3781	AGTGTTAGATTTGAAGTCGTCTAATGCAAAGATTATTGGATCTGATGGATCCGTAAGGAC	3840
Qy	3841	GTGTCTAGAGCGTCGACGGTGAAGTACTAGCTCCTGCGTGATCAGGAAAAATGTGGAAAGCTTA	3900
Db	3841	GTGTCTAGAGCGTCGACGGTGAAGTACTAGCTCCTGCGTGATCAGGAAAAATGTGGAAAGCTTA	3900
Qy	3901	ACGATTTTGTACATTTTACTTATCACAACTTGTTTTTATAATAATTCGCTTAAATGAGC	3960
Db	3901	ACGATTTTGTACATTTTACTTATCACAACTTGTTTTTATAATAATTCGCTTAAATGAGC	3960
Qy	3961	AGCTATTACTTAATCTCGTAGTGGTTTTTGACAAAATCAGCTTCTTTAGAACTAAAATAT	4020
Db	3961	AGCTATTACTTAATCTCGTAGTGGTTTTTGACAAAATCAGCTTCTTTAGAACTAAAATAT	4020
Qy	4021	CATTTTTTTTCGTAATTTTTTTAATGAAAAATGCTCTAGTGTTATACCTTTCCAAAATCAC	4080
Db	4021	CATTTTTTTTCGTAATTTTTTTAATGAAAAATGCTCTAGTGTTATACCTTTCCAAAATCAC	4080
Qy	4081	CATTAATTAGGTAGTGTTTAAAGCTTGTTGTACAAAACGACACGCATTTTTTTCTCCA	4140
Db	4081	CATTAATTAGGTAGTGTTTAAAGCTTGTTGTACAAAACGACACGCATTTTTTTCTCCA	4140
Qy	4141	CTGTAGGTTGTAGTTACGCGAAAAACAAAATCGTTCTGTGAAAATTCAAACAAAATATTT	4200
Db	4141	CTGTAGGTTGTAGTTACGCGAAAAACAAAATCGTTCTGTGAAAATTCAAACAAAATATTT	4200
Qy	4201	TTTCGTAAAAACACTTATCAATGAGTAAAGTAACAATTCATGAATAATTCATGTAAAAA	4260
Db	4201	TTTCGTAAAAACACTTATCAATGAGTAAAGTAACAATTCATGAATAATTCATGTAAAAA	4260
Qy	4261	AAAAATACTAGAAAAGGAATTTTTTCATTACGAGATGCTTAAAAATCTGTTTCAAGGTAGA	4320
Db	4261	AAAAATACTAGAAAAGGAATTTTTTCATTACGAGATGCTTAAAAATCTGTTTCAAGGTAGA	4320
Qy	4321	GATTTTTTCGATATTTTCGAAAAATTTTGTAAAACTGTAAATCCGTAAAATTTTGCTAAACA	4380
Db	4321	GATTTTTTCGATATTTTCGAAAAATTTTGTAAAACTGTAAATCCGTAAAATTTTGCTAAACA	4380
Qy	4381	TATATTGTGTTGTTTTGGTAAGTATTGACCCAAGCTATCACCTCCTGCAGTATGTCGTGC	4440
Db	4381	TATATTGTGTTGTTTTGGTAAGTATTGACCCAAGCTATCACCTCCTGCAGTATGTCGTGC	4440
Qy	4441	TAATTACTGGACACATTGTATAACAGTTCCACTGTATTGACAATAATAAACCTCTTCAT	4500
Db	4441	TAATTACTGGACACATTGTATAACAGTTCCACTGTATTGACAATAATAAACCTCTTCAT	4500
Qy	4501	TGACTTGAGAATGTCTGGACAGATTTGGCTTTGTATTTTGTATTTACAAATGTTTTTTTG	4560
Db	4501	TGACTTGAGAATGTCTGGACAGATTTGGCTTTGTATTTTGTATTTACAAATGTTTTTTTG	4560
Qy	4561	GTGATTTACCCATCCAAGGCATTCTCCAGGATGGTTGTGGCATCACGCCGATTGGCAAAC	4620
Db	4561	GTGATTTACCCATCCAAGGCATTCTCCAGGATGGTTGTGGCATCACGCCGATTGGCAAAC	4620
Qy	4621	AAAAACTAAAATGAACTAAAAAGAAACAGTTTCCGCTGTCCCGTTCTCTAGTGGGAGA	4680
Db	4621	AAAAACTAAAATGAACTAAAAAGAAACAGTTTCCGCTGTCCCGTTCTCTAGTGGGAGA	4680
Qy	4681	AAGCATGAAGTAAGTTCTTTAAATATTACAAAAAAATTGAACGATATTATAAAATTCTTT	4740

Db	4681	 AAGCATGAAGTAAGTTCTTTAAATATTACAAAAAAATTGAACGATATTATAAAATTCTTT	4740
Qy	4741	AAAATATTAAAAGTAAGAACAATAAGATCAATTAAATCATAATTAATCACATTGTTTCATG	4800
Db	4741	 AAAATATTAAAAGTAAGAACAATAAGATCAATTAAATCATAATTAATCACATTGTTTCATG	4800
Qy	4801	ATCACAAATTTAATTTACTTCATACGTTGTATTGTTATGTTAAATAAAAAGATTAAATTTCT	4860
Db	4801	 ATCACAAATTTAATTTACTTCATACGTTGTATTGTTATGTTAAATAAAAAGATTAAATTTCT	4860
Qy	4861	ATGTAATTGTATCTGTACAATAACAATGTGTAGATGTTTATTCTATCGAAAGTAAATACGT	4920
Db	4861	 ATGTAATTGTATCTGTACAATAACAATGTGTAGATGTTTATTCTATCGAAAGTAAATACGT	4920
Qy	4921	CAAAACTCGAAAATTTTCAGTATAAAAAAGGTTCAACTTTTTCAAATCAGCATCAGTTCGG	4980
Db	4921	 CAAAACTCGAAAATTTTCAGTATAAAAAAGGTTCAACTTTTTCAAATCAGCATCAGTTCGG	4980
Qy	4981	TTCCAACCTCTCAAGATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGA	5040
Db	4981	 TTCCAACCTCTCAAGATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGA	5040
Qy	5041	GTTAATTATTTTACTATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAA	5100
Db	5041	 GTTAATTATTTTACTATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAA	5100
Qy	5101	TAAGTGGTCGCCAAAACGCACAGATATCGTAAATTGTGCCATTTGATTTGTCACGCCCGG	5160
Db	5101	 TAAGTGGTCGCCAAAACGCACAGATATCGTAAATTGTGCCATTTGATTTGTCACGCCCGG	5160
Qy	5161	GGGGGCTACGGAATAAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAAC	5220
Db	5161	 GGGGGCTACGGAATAAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAAC	5220
Qy	5221	TGTGATTTATTTGCGTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTT	5280
Db	5221	 TGTGATTTATTTGCGTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTT	5280
Qy	5281	GCAATATCCTATTTACCGGTAAATCAGCATTGCAATATGCAATGCATATTCAACAATAT	5340
Db	5281	 GCAATATCCTATTTACCGGTAAATCAGCATTGCAATATGCAATGCATATTCAACAATAT	5340
Qy	5341	GTAAAACAATTTCGTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAA	5400
Db	5341	 GTAAAACAATTTCGTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAA	5400
Qy	5401	CCGCATTATTAATTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAAT	5460
Db	5401	 CCGCATTATTAATTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAAT	5460
Qy	5461	TATAATCATTTTTCATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTG	5520
Db	5461	 TATAATCATTTTTCATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTG	5520
Qy	5521	ATTATAACACGAGCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTGCGTTACC	5580
Db	5521	 ATTATAACACGAGCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTGCGTTACC	5580
Qy	5581	GATCACGTGATAGATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAAATTCTT	5640

```

Db      5581 GATCACGTGATAGATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAAATTCTT 5640
Qy      5641 TCAGGTTGAGTCTGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCT 5700
        |||
Db      5641 TCAGGTTGAGTCTGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCT 5700
Qy      5701 AATAGGTAGGGAAAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCAT 5760
        |||
Db      5701 AATAGGTAGGGAAAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCAT 5760
Qy      5761 AAAATCTCGTGGTGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAG 5820
        |||
Db      5761 AAAATCTCGTGGTGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAG 5820
Qy      5821 AATGTTGTTCAACTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTA 5880
        |||
Db      5821 AATGTTGTTCAACTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTA 5880
Qy      5881 CTAAGGCAGTATGTCCTAACTCGTTCAGATCAGCGCTAACTTCGATTGAATGTGCGAAA 5940
        |||
Db      5881 CTAAGGCAGTATGTCCTAACTCGTTCAGATCAGCGCTAACTTCGATTGAATGTGCGAAA 5940
Qy      5941 TTTATAGCTCAATATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTT 6000
        |||
Db      5941 TTTATAGCTCAATATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTT 6000
Qy      6001 GTTTCAGTATGTCGCTTATACAAATGCAAACATCAATGATTTTGATGAGGACTATTTTGG 6060
        |||
Db      6001 GTTTCAGTATGTCGCTTATACAAATGCAAACATCAATGATTTTGATGAGGACTATTTTGG 6060
Qy      6061 GAGTGATGTC 6070
        |||
Db      6061 GAGTGATGTC 6070

```

RESULT 2

US-10-506-327-22

; Sequence 22, Application US/10506327

; GENERAL INFORMATION:

; APPLICANT: HIRAMATSU, Shingo

; APPLICANT: TANAKA, Takashi

; APPLICANT: YAMADA, Katsushige

; APPLICANT: TAMURA, Toshiki

; TITLE OF INVENTION: PRODUCTION OF PHYSIOLOGICALLY ACTIVE PROTEINS USING GENE RECOMB

; TITLE OF INVENTION: SILKWORMS

; FILE REFERENCE: 0210-0190PUS1

; CURRENT APPLICATION NUMBER: US/10/506,327

; CURRENT FILING DATE: 2004-09-02

; PRIOR APPLICATION NUMBER: PCT/JP03/02675

; PRIOR FILING DATE: 2003-03-06

; NUMBER OF SEQ ID NOS: 38

; SOFTWARE: Patent-In 3.2

; SEQ ID NO 22

; LENGTH: 1396

; TYPE: DNA

; ORGANISM: Bombyx mori

US-10-506-327-22

Query Match 23.0%; Score 1396; DB 46; Length 1396;

Best Local Similarity 100.0%;

Matches 1396; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	4675	GGGAGAAAGCATGAAGTAAGTTCTTTAAATATTACAAAAAATTGAACGATATTATAAAA	4734
Db	1	GGGAGAAAGCATGAAGTAAGTTCTTTAAATATTACAAAAAATTGAACGATATTATAAAA	60
Qy	4735	TTCTTTAAATATTAAAAGTAAGAACAATAAGATCAATTAAATCATAATTAATCACATTG	4794
Db	61	TTCTTTAAATATTAAAAGTAAGAACAATAAGATCAATTAAATCATAATTAATCACATTG	120
Qy	4795	TTCATGATCACAATTTAATTTACTTCATACGTTGTATTGTTATGTTAAATAAAAAGATTA	4854
Db	121	TTCATGATCACAATTTAATTTACTTCATACGTTGTATTGTTATGTTAAATAAAAAGATTA	180
Qy	4855	ATTTCTATGTAATTGTATCTGTACAATACAATGTGTAGATGTTTATTCTATCGAAAGTAA	4914
Db	181	ATTTCTATGTAATTGTATCTGTACAATACAATGTGTAGATGTTTATTCTATCGAAAGTAA	240
Qy	4915	ATACGTCAAACTCGAAAATTTTCAGTATAAAAAGGTTCAACTTTTTCAAATCAGCATCA	4974
Db	241	ATACGTCAAACTCGAAAATTTTCAGTATAAAAAGGTTCAACTTTTTCAAATCAGCATCA	300
Qy	4975	GTTTCGGTTCCAACCTCTCAAGATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGC	5034
Db	301	GTTTCGGTTCCAACCTCTCAAGATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGC	360
Qy	5035	AGGTGAGTTAATTATTTTACTATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACC	5094
Db	361	AGGTGAGTTAATTATTTTACTATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACC	420
Qy	5095	TGATAATAAGTGGTCGCCAAAACGCACAGATATCGTAAATTGTGCCATTTGATTTGTCAC	5154
Db	421	TGATAATAAGTGGTCGCCAAAACGCACAGATATCGTAAATTGTGCCATTTGATTTGTCAC	480
Qy	5155	GCCCGGGGGGCTACGGAATAAACTACATTTATTTATTTAAAAAATGAACCTTAGATTAT	5214
Db	481	GCCCGGGGGGCTACGGAATAAACTACATTTATTTATTTAAAAAATGAACCTTAGATTAT	540
Qy	5215	GTAACCTTGTGATTTATTTGCGTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGC	5274
Db	541	GTAACCTTGTGATTTATTTGCGTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGC	600
Qy	5275	AGACTTGCAATATCCTATTTACCGGTAAATCAGCATTGCAATATGCAATGCATATTCAA	5334
Db	601	AGACTTGCAATATCCTATTTACCGGTAAATCAGCATTGCAATATGCAATGCATATTCAA	660
Qy	5335	CAATATGTAAAACAATTCGTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAA	5394
Db	661	CAATATGTAAAACAATTCGTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAA	720
Qy	5395	TTATAACCGCATTATTAATTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTC	5454
Db	721	TTATAACCGCATTATTAATTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTC	780
Qy	5455	GCAAATTATAATCATTTTCATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGG	5514
Db	781	GCAAATTATAATCATTTTCATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGG	840
Qy	5515	TATGTGATTATAACACGAGCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGC	5574
Db	841	TATGTGATTATAACACGAGCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGC	900

Qy	5575	GTTACCGATCACGTGATAGATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAA	5634
Db	901	GTTACCGATCACGTGATAGATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAA	960
Qy	5635	ATTCTTTTCAGGTTGAGTCTGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTA	5694
Db	961	ATTCTTTTCAGGTTGAGTCTGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTA	1020
Qy	5695	CCAGCTAATAGGTAGGGAAAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGT	5754
Db	1021	CCAGCTAATAGGTAGGGAAAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGT	1080
Qy	5755	GACCATAAAATCTCGTGGTGTATGAGATACAATTATGTACTTTCCACAAATGTTTACAT	5814
Db	1081	GACCATAAAATCTCGTGGTGTATGAGATACAATTATGTACTTTCCACAAATGTTTACAT	1140
Qy	5815	AATTAGAATGTTGTTCAACTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTA	5874
Db	1141	AATTAGAATGTTGTTCAACTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTA	1200
Qy	5875	CCACTACTAAGGCAGTATGTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGT	5934
Db	1201	CCACTACTAAGGCAGTATGTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGT	1260
Qy	5935	GCGAAATTTATAGCTCAATATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAA	5994
Db	1261	GCGAAATTTATAGCTCAATATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAA	1320
Qy	5995	CATTTTGTTCAGTATGTCGCTTATACAAATGCAAACATCAATGATTTTGATGAGGACTA	6054
Db	1321	CATTTTGTTCAGTATGTCGCTTATACAAATGCAAACATCAATGATTTTGATGAGGACTA	1380
Qy	6055	TTTTGGGAGTGATGTC	6070
Db	1381	TTTTGGGAGTGATGTC	1396

RESULT 3

PCT-US09-32660-5

; Sequence 5, Application PC/TUS0932660

; GENERAL INFORMATION

; APPLICANT: ENTOGENETICS, INC. ET AL.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: PCT/US09/32660

; CURRENT FILING DATE: 2009-01-30

; PRIOR APPLICATION NUMBER: US 61/025,616

; PRIOR FILING DATE: 2008-02-01

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn version 3.5

; SEQ ID NO 5

; LENGTH: 1051

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Chemically Synthesized

PCT-US09-32660-5

Query Match 16.1%; Score 977.8; DB 4; Length 1051;

Best Local Similarity 98.9%;

		Matches 1037; Conservative 0; Mismatches 7; Indels 5; Gaps 5;							
Qy	4995	ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	5054						
Db	1	ATGAGAGTCAAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	60						
Qy	5055	TATTATTTT CAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	5114						
Db	61	TATTATTTT CAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	120						
Qy	5115	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACACGCCCGGGGGGGCTACGGAAT	5174						
Db	121	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACACGCCCTGGGGGGCTACGGAAT	180						
Qy	5175	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC	5234						
Db	181	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC	240						
Qy	5235	GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT	5294						
Db	241	GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT	299						
Qy	5295	CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAACAATTC	5352						
Db	300	CACCGGTAAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAACAATTC	359						
Qy	5353	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	5412						
Db	360	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	419						
Qy	5413	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	5472						
Db	420	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	479						
Qy	5473	CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA	5532						
Db	480	CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA	538						
Qy	5533	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	5592						
Db	539	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	598						
Qy	5593	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAAATTCTTTCAGGTTGAGTC	5652						
Db	599	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGTAAATTCTTTCAGGTTGAGTC	658						
Qy	5653	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA	5712						
Db	659	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG-	717						
Qy	5713	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	5772						
Db	718	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	777						
Qy	5773	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	5832						
Db	778	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	837						
Qy	5833	CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	5892						
Db	838	CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	897						

```

Qy      5893  GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 5952
          |||
Db      898  GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 957

Qy      5953  TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTCAGTATGT 6012
          |||
Db      958  TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTCAGTATGT 1017

Qy      6013  CGCTTATACAAATGCAAACATCAATGATT 6041
          |||
Db      1018 CGCTTATACAAATGCAAACATCAATGATT 1046

```

RESULT 4

US-12-363-326-5

; Sequence 5, Application US/12363326

; GENERAL INFORMATION

; APPLICANT: Brigham, David L.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: US/12/363,326

; CURRENT FILING DATE: 2009-01-30

; PRIOR APPLICATION NUMBER: US 61/025,616

; PRIOR FILING DATE: 2008-02-01

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn version 3.5

; SEQ ID NO 5

; LENGTH: 1051

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Chemically Synthesized

US-12-363-326-5

```

Query Match          16.1%;  Score 977.8;  DB 90;  Length 1051;
Best Local Similarity 98.9%;
Matches 1037;  Conservative 0;  Mismatches 7;  Indels 5;  Gaps 5;

```

```

Qy      4995  ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 5054
          |||
Db      1    1  ATGAGAGTCAAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 60

Qy      5055  TATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 5114
          |||
Db      61    61  TATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 120

Qy      5115  AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACACGCCCGGGGGGGCTACGGAAT 5174
          |||
Db      121   121  AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACACGCCCTGGGGGGCTACGGAAT 180

Qy      5175  AAACCTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC 5234
          |||
Db      181   181  AAACCTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC 240

Qy      5235  GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT 5294
          |||
Db      241   241  GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT 299

Qy      5295  CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAACAATTC 5352

```

Db	300		
		CACCGGTAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAACAATTC	359
Qy	5353	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	5412
Db	360	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	419
Qy	5413	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	5472
Db	420	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	479
Qy	5473	CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA	5532
Db	480	CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA	538
Qy	5533	GCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	5592
Db	539	GCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	598
Qy	5593	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAAATTCTTTCAGGTTGAGTC	5652
Db	599	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGTAAATTCTTTCAGGTTGAGTC	658
Qy	5653	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA	5712
Db	659	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG-	717
Qy	5713	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	5772
Db	718	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	777
Qy	5773	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	5832
Db	778	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	837
Qy	5833	CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	5892
Db	838	CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	897
Qy	5893	GTCCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	5952
Db	898	GTCCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	957
Qy	5953	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	6012
Db	958	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	1017
Qy	6013	CGCTTATACAAATGCAAACATCAATGATT	6041
Db	1018	CGCTTATACAAATGCAAACATCAATGATT	1046

RESULT 5

PCT-US09-32660-30

; Sequence 30, Application PC/TUS0932660

; GENERAL INFORMATION

; APPLICANT: ENTOGENETICS, INC. ET AL.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: PCT/US09/32660


```

; CURRENT FILING DATE: 2009-01-30
; PRIOR APPLICATION NUMBER: US 61/025,616
; PRIOR FILING DATE: 2008-02-01
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.5
; SEQ ID NO 30
; LENGTH: 3029
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chemically synthesized
PCT-US09-32660-30

```

```

Query Match          16.1%; Score 977.8; DB 4; Length 3029;
Best Local Similarity 98.9%;
Matches 1037; Conservative 0; Mismatches 7; Indels 5; Gaps 5;

```

Qy	4995	ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	5054
Db	1	ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	60
Qy	5055	TATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	5114
Db	61	TATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	120
Qy	5115	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCGGGGGGCTACGGAAT	5174
Db	121	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCTGGGGGGCTACGGAAT	180
Qy	5175	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTGTGATTTATTTGC	5234
Db	181	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTGTGATTTATTTGC	240
Qy	5235	GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT	5294
Db	241	GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT	299
Qy	5295	CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAAACAATTC	5352
Db	300	CACCGGTAAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAAACAATTC	359
Qy	5353	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	5412
Db	360	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	419
Qy	5413	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	5472
Db	420	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	479
Qy	5473	CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA	5532
Db	480	CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA	538
Qy	5533	GCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTGCGGTTACCGATCACGTGATA	5592
Db	539	GCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTGCGGTTACCGATCACGTGATA	598
Qy	5593	GATTCTATGAAGCACTGCTCTTGTAGGGCTAGTGTTAGCAAATTCTTTCAGGTTGAGTC	5652
Db	599	GATTCTATGAAGCACTGCTCTTGTAGGGCTAGTGTTAGTAAATTCTTTCAGGTTGAGTC	658

```
Qy      5653 TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA 5712
          |||
Db      659 TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG- 717

Qy      5713 AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG 5772
          |||
Db      718 AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG 777

Qy      5773 TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA 5832
          |||
Db      778 TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA 837

Qy      5833 CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT 5892
          |||
Db      838 CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT 897

Qy      5893 GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 5952
          |||
Db      898 GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 957

Qy      5953 TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTCAGTATGT 6012
          |||
Db      958 TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTCAGTATGT 1017

Qy      6013 CGCTTATACAAATGCAAACATCAATGATT 6041
          |||
Db      1018 CGCTTATACAAATGCAAACATCAATGATT 1046
```

RESULT 6

US-12-363-326-30

; Sequence 30, Application US/12363326

; GENERAL INFORMATION

; APPLICANT: Brigham, David L.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: US/12/363,326

; CURRENT FILING DATE: 2009-01-30

; PRIOR APPLICATION NUMBER: US 61/025,616

; PRIOR FILING DATE: 2008-02-01

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn version 3.5

; SEQ ID NO 30

; LENGTH: 3029

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Chemically synthesized

US-12-363-326-30

Query Match 16.1%; Score 977.8; DB 90; Length 3029;

Best Local Similarity 98.9%;

Matches 1037; Conservative 0; Mismatches 7; Indels 5; Gaps 5;

```
Qy      4995 ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 5054
          |||
Db      1  ATGAGAGTCAAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 60

Qy      5055 TATTATTTTCAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 5114
          |||
```

Db	61	TATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	120
Qy	5115	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCGGGGGGCTACGGAAT	5174
Db	121	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCTGGGGGGCTACGGAAT	180
Qy	5175	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTGTGATTTATTTGC	5234
Db	181	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTGTGATTTATTTGC	240
Qy	5235	GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT	5294
Db	241	GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT	299
Qy	5295	CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAAACAATTC	5352
Db	300	CACCGGTAAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAAACAATTC	359
Qy	5353	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	5412
Db	360	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	419
Qy	5413	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	5472
Db	420	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	479
Qy	5473	CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA	5532
Db	480	CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA	538
Qy	5533	GCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	5592
Db	539	GCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	598
Qy	5593	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAAATTCTTTCAGGTTGAGTC	5652
Db	599	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGTAAATTCTTTCAGGTTGAGTC	658
Qy	5653	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA	5712
Db	659	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG-	717
Qy	5713	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	5772
Db	718	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	777
Qy	5773	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	5832
Db	778	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	837
Qy	5833	CTTGCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	5892
Db	838	CTTGCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	897
Qy	5893	GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	5952
Db	898	GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	957
Qy	5953	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	6012
Db	958	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	1017

```

Qy      6013 CGCTTATACAAATGCAAACATCAATGATT 6041
          |||
Db      1018 CGCTTATACAAATGCAAACATCAATGATT 1046

```

RESULT 7

PCT-US09-32660-31

; Sequence 31, Application PC/TUS0932660

; GENERAL INFORMATION

; APPLICANT: ENTOGENETICS, INC. ET AL.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: PCT/US09/32660

; CURRENT FILING DATE: 2009-01-30

; PRIOR APPLICATION NUMBER: US 61/025,616

; PRIOR FILING DATE: 2008-02-01

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn version 3.5

; SEQ ID NO 31

; LENGTH: 3749

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Chemically synthesized

PCT-US09-32660-31

Query Match 16.1%; Score 977.8; DB 4; Length 3749;

Best Local Similarity 98.9%;

Matches 1037; Conservative 0; Mismatches 7; Indels 5; Gaps 5;

```

Qy      4995 ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 5054
          |||
Db      1   ATGAGAGTCAAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 60

Qy      5055 TATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 5114
          |||
Db      61  TATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 120

Qy      5115 AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCGGGGGGCTACGGAAT 5174
          |||
Db      121 AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCTGGGGGGCTACGGAAT 180

Qy      5175 AAACACTACATTTATTTATTTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC 5234
          |||
Db      181 AAACACTACATTTATTTATTTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC 240

Qy      5235 GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT 5294
          |||
Db      241 GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT 299

Qy      5295 CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAACAATTC 5352
          |||
Db      300 CACCGGTAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAACAATTC 359

Qy      5353 GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA 5412
          |||
Db      360 GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA 419

Qy      5413 TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT 5472

```

```
|||||
Db      420 TTTATTATGATATCTATTAACAATTGCTATTGCCCTTTTTTCGCAAATTATAATCATTTT 479
Qy      5473 CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA 5532
|||||
Db      480 CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA 538
Qy      5533 GCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA 5592
|||||
Db      539 GCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA 598
Qy      5593 GATTCTATGAAGCACTGCTCTTGTAGGGCTAGTGTAGCAAATTCTTTCAGGTTGAGTC 5652
|||||
Db      599 GATTCTATGAAGCACTGCTCTTGTAGGGCTAGTGTAGTAAATTCTTTCAGGTTGAGTC 658
Qy      5653 TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA 5712
|||||
Db      659 TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG- 717
Qy      5713 AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG 5772
|||||
Db      718 AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG 777
Qy      5773 TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA 5832
|||||
Db      778 TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA 837
Qy      5833 CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT 5892
|||||
Db      838 CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT 897
Qy      5893 GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 5952
|||||
Db      898 GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 957
Qy      5953 TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTCAGTATGT 6012
|||||
Db      958 TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTCAGTATGT 1017
Qy      6013 CGCTTATACAAATGCAAACATCAATGATT 6041
|||||
Db      1018 CGCTTATACAAATGCAAACATCAATGATT 1046
```

RESULT 8

US-12-363-326-31

; Sequence 31, Application US/12363326

; GENERAL INFORMATION

; APPLICANT: Brigham, David L.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: US/12/363,326

; CURRENT FILING DATE: 2009-01-30

; PRIOR APPLICATION NUMBER: US 61/025,616

; PRIOR FILING DATE: 2008-02-01

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn version 3.5

; SEQ ID NO 31

; LENGTH: 3749

; TYPE: DNA

; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Chemically synthesized
 US-12-363-326-31

Query Match 16.1%; Score 977.8; DB 90; Length 3749;
 Best Local Similarity 98.9%;
 Matches 1037; Conservative 0; Mismatches 7; Indels 5; Gaps 5;

Qy	4995	ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	5054
Db	1	ATGAGAGTCAAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	60
Qy	5055	TATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	5114
Db	61	TATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	120
Qy	5115	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCGGGGGGCTACGGAAT	5174
Db	121	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCGGGGGGCTACGGAAT	180
Qy	5175	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTGTGATTTATTTGC	5234
Db	181	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTGTGATTTATTTGC	240
Qy	5235	GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT	5294
Db	241	GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT	299
Qy	5295	CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAACAATTC	5352
Db	300	CACCGGTAAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAACAATTC	359
Qy	5353	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	5412
Db	360	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	419
Qy	5413	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	5472
Db	420	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	479
Qy	5473	CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA	5532
Db	480	CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA	538
Qy	5533	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTGCGGTTACCGATCACGTGATA	5592
Db	539	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTGCGGTTACCGATCACGTGATA	598
Qy	5593	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAAATTCTTTCAGGTTGAGTC	5652
Db	599	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGTAAATTCTTTCAGGTTGAGTC	658
Qy	5653	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA	5712
Db	659	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG-	717
Qy	5713	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	5772
Db	718	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	777

Qy	5773	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	5832
Db	778	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	837
Qy	5833	CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	5892
Db	838	CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	897
Qy	5893	GTCTTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	5952
Db	898	GTCTTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	957
Qy	5953	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	6012
Db	958	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	1017
Qy	6013	CGCTTATACAAATGCAAACATCAATGATT	6041
Db	1018	CGCTTATACAAATGCAAACATCAATGATT	1046

RESULT 9

PCT-US09-32660-32

; Sequence 32, Application PC/TUS0932660

; GENERAL INFORMATION

; APPLICANT: ENTOGENETICS, INC. ET AL.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: PCT/US09/32660

; CURRENT FILING DATE: 2009-01-30

; PRIOR APPLICATION NUMBER: US 61/025,616

; PRIOR FILING DATE: 2008-02-01

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn version 3.5

; SEQ ID NO 32

; LENGTH: 3971

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Chemically synthesized

PCT-US09-32660-32

Query Match 16.1%; Score 977.8; DB 4; Length 3971;

Best Local Similarity 98.9%;

Matches 1037; Conservative 0; Mismatches 7; Indels 5; Gaps 5;

Qy	4995	ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	5054
Db	1	ATGAGAGTCAAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	60
Qy	5055	TATTATTTTACAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	5114
Db	61	TATTATTTTACAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	120
Qy	5115	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCGGGGGGCTACGGAAT	5174
Db	121	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCTGGGGGGCTACGGAAT	180
Qy	5175	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC	5234

Db	181	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTGTGATTTATTTGC	240
Qy	5235	GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT	5294
Db	241	GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT	299
Qy	5295	CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAACAATTC	5352
Db	300	CACCGGTAAAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAACAATTC	359
Qy	5353	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	5412
Db	360	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	419
Qy	5413	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	5472
Db	420	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	479
Qy	5473	CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA	5532
Db	480	CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA	538
Qy	5533	GCTGCCCAGTGTCTCTCGCCAGATCTTCTCAGTGGGTGCGTTACCGATCACGTGATA	5592
Db	539	GCTGCCCAGTGTGTCTCTCGCCAGATCTTCTCAGTGGGTGCGTTACCGATCACGTGATA	598
Qy	5593	GATTCTATGAAGCACTGCTCTTGTAGGGCTAGTGTTAGCAAATTCTTTCAGGTTGAGTC	5652
Db	599	GATTCTATGAAGCACTGCTCTTGTAGGGCTAGTGTTAGTAAATTCTTTCAGGTTGAGTC	658
Qy	5653	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA	5712
Db	659	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG-	717
Qy	5713	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	5772
Db	718	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	777
Qy	5773	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	5832
Db	778	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	837
Qy	5833	CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	5892
Db	838	CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	897
Qy	5893	GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	5952
Db	898	GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	957
Qy	5953	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	6012
Db	958	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	1017
Qy	6013	CGCTTATACAAATGCAAACATCAATGATT	6041
Db	1018	CGCTTATACAAATGCAAACATCAATGATT	1046

RESULT 10

US-12-363-326-32


```
; Sequence 32, Application US/12363326
; GENERAL INFORMATION
; APPLICANT: Brigham, David L.
; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant
; TITLE OF INVENTION: Spider Silk Polypeptides
; FILE REFERENCE: 58835-370587
; CURRENT APPLICATION NUMBER: US/12/363,326
; CURRENT FILING DATE: 2009-01-30
; PRIOR APPLICATION NUMBER: US 61/025,616
; PRIOR FILING DATE: 2008-02-01
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.5
; SEQ ID NO 32
; LENGTH: 3971
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chemically synthesized
US-12-363-326-32
```

```
Query Match          16.1%; Score 977.8; DB 90; Length 3971;
Best Local Similarity 98.9%;
Matches 1037; Conservative 0; Mismatches 7; Indels 5; Gaps 5;
```

```
Qy      4995 ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 5054
          |||
Db      1 ATGAGAGTCAAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 60

Qy      5055 TATTATTTTACAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 5114
          |||
Db      61 TATTATTTTACAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 120

Qy      5115 AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACACGCCCGGGGGGGCTACGGAAT 5174
          |||
Db      121 AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACACGCCCTGGGGGGCTACGGAAT 180

Qy      5175 AAACCTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC 5234
          |||
Db      181 AAACCTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC 240

Qy      5235 GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT 5294
          |||
Db      241 GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT 299

Qy      5295 CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAACAATTC 5352
          |||
Db      300 CACCGGTAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAACAATTC 359

Qy      5353 GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA 5412
          |||
Db      360 GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA 419

Qy      5413 TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT 5472
          |||
Db      420 TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT 479

Qy      5473 CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA 5532
          |||
Db      480 CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA 538

Qy      5533 GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA 5592
```

```

|||||
Db      539 GCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA 598
Qy      5593 GATTCTATGAAGCACTGCTCTTGTAGGGCTAGTGTTAGCAAATTCTTTCAGGTTGAGTC 5652
|||||
Db      599 GATTCTATGAAGCACTGCTCTTGTAGGGCTAGTGTTAGTAAATTCTTTCAGGTTGAGTC 658
Qy      5653 TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA 5712
|||||
Db      659 TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG- 717
Qy      5713 AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG 5772
|||||
Db      718 AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG 777
Qy      5773 TGTATGAGATACAATTATGTACTTTCCACAAAATGTTTACATAATTAGAATGTTGTTCAA 5832
|||||
Db      778 TGTATGAGATACAATTATGTACTTTCCACAAAATGTTTACATAATTAGAATGTTGTTCAA 837
Qy      5833 CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT 5892
|||||
Db      838 CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT 897
Qy      5893 GTCCTAACTCGTTCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 5952
|||||
Db      898 GTCCTAACTCGTTCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 957
Qy      5953 TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTCAGTATGT 6012
|||||
Db      958 TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTCAGTATGT 1017
Qy      6013 CGCTTATACAAATGCAAACATCAATGATT 6041
|||||
Db      1018 CGCTTATACAAATGCAAACATCAATGATT 1046

```

RESULT 11

PCT-US09-32660-33

; Sequence 33, Application PC/TUS0932660

; GENERAL INFORMATION

; APPLICANT: ENTOGENETICS, INC. ET AL.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: PCT/US09/32660

; CURRENT FILING DATE: 2009-01-30

; PRIOR APPLICATION NUMBER: US 61/025,616

; PRIOR FILING DATE: 2008-02-01

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn version 3.5

; SEQ ID NO 33

; LENGTH: 4691

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Chemically synthesized

PCT-US09-32660-33

Query Match 16.1%; Score 977.8; DB 4; Length 4691;

Best Local Similarity 98.9%;

Matches 1037; Conservative 0; Mismatches 7; Indels 5; Gaps 5;

Qy	4995	ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	5054
Db	1	ATGAGAGTCAAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	60
Qy	5055	TATTATTTTCAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	5114
Db	61	TATTATTTTCAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	120
Qy	5115	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACAGCCCGGGGGGGCTACGGAAT	5174
Db	121	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACAGCCCTGGGGGGCTACGGAAT	180
Qy	5175	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGATTTATTTGC	5234
Db	181	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGATTTATTTGC	240
Qy	5235	GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT	5294
Db	241	GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT	299
Qy	5295	CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAACAATTC	5352
Db	300	CACCGGTAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAACAATTC	359
Qy	5353	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	5412
Db	360	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	419
Qy	5413	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	5472
Db	420	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	479
Qy	5473	CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA	5532
Db	480	CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA	538
Qy	5533	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	5592
Db	539	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	598
Qy	5593	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAAATTCCTTCAGGTTGAGTC	5652
Db	599	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGTAAATTCCTTCAGGTTGAGTC	658
Qy	5653	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA	5712
Db	659	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG-	717
Qy	5713	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	5772
Db	718	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	777
Qy	5773	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	5832
Db	778	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	837
Qy	5833	CTTGCCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	5892
Db	838	CTTGCCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	897

```

Qy      5893  GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 5952
          |||
Db      898  GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 957

Qy      5953  TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTCAGTATGT 6012
          |||
Db      958  TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTCAGTATGT 1017

Qy      6013  CGCTTATACAAATGCAAACATCAATGATT 6041
          |||
Db      1018 CGCTTATACAAATGCAAACATCAATGATT 1046

```

RESULT 12

US-12-363-326-33

; Sequence 33, Application US/12363326

; GENERAL INFORMATION

; APPLICANT: Brigham, David L.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: US/12/363,326

; CURRENT FILING DATE: 2009-01-30

; PRIOR APPLICATION NUMBER: US 61/025,616

; PRIOR FILING DATE: 2008-02-01

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn version 3.5

; SEQ ID NO 33

; LENGTH: 4691

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Chemically synthesized

US-12-363-326-33

```

Query Match          16.1%;  Score 977.8;  DB 90;  Length 4691;
Best Local Similarity 98.9%;
Matches 1037;  Conservative 0;  Mismatches 7;  Indels 5;  Gaps 5;

```

```

Qy      4995  ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 5054
          |||
Db      1    1  ATGAGAGTCAAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 60

Qy      5055  TATTATTTTACAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 5114
          |||
Db      61    61  TATTATTTTACAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 120

Qy      5115  AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACACGCCCGGGGGGCTACGGAAT 5174
          |||
Db      121   121  AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACACGCCCTGGGGGGCTACGGAAT 180

Qy      5175  AAACCTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC 5234
          |||
Db      181   181  AAACCTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC 240

Qy      5235  GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT 5294
          |||
Db      241   241  GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT 299

Qy      5295  CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAACAATTC 5352
          |||

```

Db	300	CACCGGTAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAACAATTC	359
Qy	5353	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	5412
Db	360	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	419
Qy	5413	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	5472
Db	420	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	479
Qy	5473	CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA	5532
Db	480	CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA	538
Qy	5533	GCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	5592
Db	539	GCTGCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	598
Qy	5593	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAAATTCCTTCAGGTTGAGTC	5652
Db	599	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGTAAATTCCTTCAGGTTGAGTC	658
Qy	5653	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA	5712
Db	659	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG-	717
Qy	5713	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	5772
Db	718	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	777
Qy	5773	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	5832
Db	778	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	837
Qy	5833	CTTGCCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	5892
Db	838	CTTGCCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	897
Qy	5893	GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	5952
Db	898	GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	957
Qy	5953	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	6012
Db	958	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	1017
Qy	6013	CGCTTATACAAATGCAAACATCAATGATT	6041
Db	1018	CGCTTATACAAATGCAAACATCAATGATT	1046

RESULT 13

PCT-US09-32660-34

; Sequence 34, Application PC/TUS0932660

; GENERAL INFORMATION

; APPLICANT: ENTOGENETICS, INC. ET AL.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: PCT/US09/32660

; CURRENT FILING DATE: 2009-01-30

; PRIOR APPLICATION NUMBER: US 61/025,616
 ; PRIOR FILING DATE: 2008-02-01
 ; NUMBER OF SEQ ID NOS: 41
 ; SOFTWARE: PatentIn version 3.5
 ; SEQ ID NO 34
 ; LENGTH: 4913
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Chemically synthesized
 PCT-US09-32660-34

Query Match 16.1%; Score 977.8; DB 4; Length 4913;
 Best Local Similarity 98.9%;
 Matches 1037; Conservative 0; Mismatches 7; Indels 5; Gaps 5;

Qy	4995	ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	5054
Db	1	ATGAGAGTCAAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC	60
Qy	5055	TATTATTTTACAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	5114
Db	61	TATTATTTTACAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA	120
Qy	5115	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCGGGGGGCTACGGAAT	5174
Db	121	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCGGGGGGCTACGGAAT	180
Qy	5175	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTGTGATTTATTTGC	5234
Db	181	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTGTGATTTATTTGC	240
Qy	5235	GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT	5294
Db	241	GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT	299
Qy	5295	CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAACAATTC	5352
Db	300	CACCGGTAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAACAATTC	359
Qy	5353	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	5412
Db	360	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	419
Qy	5413	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	5472
Db	420	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	479
Qy	5473	CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA	5532
Db	480	CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA	538
Qy	5533	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTGCGGTTACCGATCACGTGATA	5592
Db	539	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTGCGGTTACCGATCACGTGATA	598
Qy	5593	GATTCTATGAAGCACTGCTCTTGTAGGGCTAGTGTTAGCAAATTCTTTCAGGTTGAGTC	5652
Db	599	GATTCTATGAAGCACTGCTCTTGTAGGGCTAGTGTTAGTAAATTCTTTCAGGTTGAGTC	658
Qy	5653	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA	5712

```

          |||
Db      659 TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG- 717
Qy      5713 AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG 5772
          |||
Db      718 AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG 777
Qy      5773 TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA 5832
          |||
Db      778 TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA 837
Qy      5833 CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT 5892
          |||
Db      838 CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT 897
Qy      5893 GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 5952
          |||
Db      898 GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA 957
Qy      5953 TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT 6012
          |||
Db      958 TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT 1017
Qy      6013 CGCTTATACAAATGCAAACATCAATGATT 6041
          |||
Db      1018 CGCTTATACAAATGCAAACATCAATGATT 1046

```

RESULT 14

US-12-363-326-34

; Sequence 34, Application US/12363326

; GENERAL INFORMATION

; APPLICANT: Brigham, David L.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: US/12/363,326

; CURRENT FILING DATE: 2009-01-30

; PRIOR APPLICATION NUMBER: US 61/025,616

; PRIOR FILING DATE: 2008-02-01

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn version 3.5

; SEQ ID NO 34

; LENGTH: 4913

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Chemically synthesized

US-12-363-326-34

Query Match 16.1%; Score 977.8; DB 90; Length 4913;

Best Local Similarity 98.9%;

Matches 1037; Conservative 0; Mismatches 7; Indels 5; Gaps 5;

```

Qy      4995 ATGAGAGTCAAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 5054
          |||
Db      1   ATGAGAGTCAAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 60
Qy      5055 TATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 5114
          |||
Db      61   TATTATTTTCAGAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 120

```

Qy	5115	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCGGGGGGGCTACGGAAT	5174
Db	121	AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCTGGGGGGCTACGGAAT	180
Qy	5175	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTGTGATTTATTTGC	5234
Db	181	AAACTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTGTGATTTATTTGC	240
Qy	5235	GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT	5294
Db	241	GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT	299
Qy	5295	CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAAACAATTC	5352
Db	300	CACCGGTAAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAAACAATTC	359
Qy	5353	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	5412
Db	360	GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA	419
Qy	5413	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	5472
Db	420	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	479
Qy	5473	CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA	5532
Db	480	CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA	538
Qy	5533	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	5592
Db	539	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	598
Qy	5593	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAAATTCTTTCAGGTTGAGTC	5652
Db	599	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGTAAATTCTTTCAGGTTGAGTC	658
Qy	5653	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA	5712
Db	659	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG-	717
Qy	5713	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	5772
Db	718	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	777
Qy	5773	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	5832
Db	778	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	837
Qy	5833	CTTGCCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	5892
Db	838	CTTGCCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	897
Qy	5893	GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	5952
Db	898	GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	957
Qy	5953	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	6012
Db	958	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	1017

Qy 6013 CGCTTATACAAATGCAAACATCAATGATT 6041
 |||
 Db 1018 CGCTTATACAAATGCAAACATCAATGATT 1046

RESULT 15

PCT-US09-32660-35

; Sequence 35, Application PC/TUS0932660

; GENERAL INFORMATION

; APPLICANT: ENTOGENETICS, INC. ET AL.

; TITLE OF INVENTION: Methods, Compositions and Systems for Production of Recombinant

; TITLE OF INVENTION: Spider Silk Polypeptides

; FILE REFERENCE: 58835-370587

; CURRENT APPLICATION NUMBER: PCT/US09/32660

; CURRENT FILING DATE: 2009-01-30

; PRIOR APPLICATION NUMBER: US 61/025,616

; PRIOR FILING DATE: 2008-02-01

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: PatentIn version 3.5

; SEQ ID NO 35

; LENGTH: 5633

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Chemically synthesized

PCT-US09-32660-35

Query Match 16.1%; Score 977.8; DB 4; Length 5633;

Best Local Similarity 98.9%;

Matches 1037; Conservative 0; Mismatches 7; Indels 5; Gaps 5;

Qy 4995 ATGAGAGTCAAACCTTTGTGATCTTGTGCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 5054
 |||
 Db 1 ATGAGAGTCAAACCTTTGTGATCTTGGTCTGCGCTCTGCAGGTGAGTTAATTATTTTAC 60

Qy 5055 TATTATTTTACAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 5114
 |||
 Db 61 TATTATTTTACAAGGTGGCCAGACGATATCACGGGCCACCTGATAATAAGTGGTCGCCAA 120

Qy 5115 AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCGGGGGGCTACGGAAT 5174
 |||
 Db 121 AACGCACAGATATCGTAAATTGTGCCATTTGATTTGTACGCCCCTGGGGGGCTACGGAAT 180

Qy 5175 AAACCTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC 5234
 |||
 Db 181 AAACCTACATTTATTTATTTAAAAAATGAACCTTAGATTATGTAACCTTGTGATTTATTTGC 240

Qy 5235 GTCAAAAGTAGGCAAGATGAATCTATGTAAATACCTGGGCAGACTTGCAATATCCTATTT 5294
 |||
 Db 241 GTCAAAAGTAGGCAAGATGAATCTATGTAAATA-CTGGGCAGACTTGCAATATCCTATTT 299

Qy 5295 CACCGGT-AAATCAGCATTGCAATATGCAATGC-ATATTCAACAATATGTAAACAATTC 5352
 |||
 Db 300 CACCGGTAAATCAGCATTGCAATATGCAATGCTAAATTCAACAATATGTAAACAATTC 359

Qy 5353 GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA 5412
 |||
 Db 360 GTAAAGCATCATTAGAAAATAGACGAAAGAAATTGCATAAAATTATAACCGCATTATTAA 419

Qy 5413 TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT 5472
 |||

Db	420	TTTATTATGATATCTATTAACAATTGCTATTGCCTTTTTTTTCGCAAATTATAATCATTTT	479
Qy	5473	CATAACCTCGAGGTAGCATTCTGTTACATTTTAATACATTGGTATGTGATTATAACACGA	5532
Db	480	CATAACCTCGAGGTAGCATTCTG-TACATTTTAATACATTGGTATGTGATTATAACACGA	538
Qy	5533	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	5592
Db	539	GCTGCCCCACTGAGTTTCTCGCCAGATCTTCTCAGTGGGTCGCGTTACCGATCACGTGATA	598
Qy	5593	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGCAAATTCTTTCAGGTTGAGTC	5652
Db	599	GATTCTATGAAGCACTGCTCTTGTTAGGGCTAGTGTTAGTAAATTCTTTCAGGTTGAGTC	658
Qy	5653	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTAATAGGTAGGGA	5712
Db	659	TGAGAGCTCACCTACCCATCGGAGCGTAGCTGGAATAGGCTACCAGCTGGTAGGTAGGG-	717
Qy	5713	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	5772
Db	718	AAACAAAGCTCGAAACAAGCTCAAGTAATAACAACATAATGTGACCATAAAATCTCGTGG	777
Qy	5773	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	5832
Db	778	TGTATGAGATACAATTATGTACTTTCCACAAATGTTTACATAATTAGAATGTTGTTCAA	837
Qy	5833	CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	5892
Db	838	CTTGCCTAACGCCCCAGCTAGAACATTCAATTATTACTATTACCACTACTAAGGCAGTAT	897
Qy	5893	GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	5952
Db	898	GTCCTAACTCGTTCCAGATCAGCGCTAACTTCGATTGAATGTGCGAAATTTATAGCTCAA	957
Qy	5953	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	6012
Db	958	TATTTTAGCACTTATCGTATTGATTTAAGAAAAAATTGTTAACATTTTGTTTCAGTATGT	1017
Qy	6013	CGCTTATACAAATGCAAACATCAATGATT	6041
Db	1018	CGCTTATACAAATGCAAACATCAATGATT	1046

Search completed: September 2, 2009, 15:09:59
Job time : 6088.29 secs

SCORE 3.0